What is claimed is:

1. A mobile communication network system that comprises:

a mobile communication network,

a plurality of external networks,

a plurality of mobile terminals,

a plurality of gateways for connecting said external networks and said mobile communication network, and

a plurality of radio access points for connecting said mobile terminals to said mobile communication network;

wherein, when packets are transmitted and received between said mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of said external networks on said mobile communication network.

2. A mobile communication network system that comprises:

a mobile communication network,

a plurality of external networks,

a plurality of mobile terminals,

a plurality of gateways for connecting said external networks and said mobile communication network, and

a plurality of radio access points for connecting said mobile terminals to said mobile communication network;

wherein:

said mobile communication network is provided with means for offering virtual networks that correspond to each said external network;

said gateways are provided with means for connecting said external networks to corresponding said virtual networks; and

said mobile terminals are provided with means for setting sessions with said radio access points for any of said external networks;

said radio access points are provided with:

means for transferring packets that have been received from any of said sessions to a virtual network that has been prepared for an external network that corresponds to that session; and

means for transferring packets, which have been received from said virtual network that corresponds to any external network, to a session that has been set for said external network by said mobile terminal that is the destination of these packets; and

private leased line connections are provided between said mobile terminals and said external networks, and when transmission or reception of packets is realized between said mobile terminals, the packets are communicated by way of virtual networks that are provided to correspond to each of said external networks on said mobile communication network.

3. A mobile communication network system according to claim 2, wherein each of said radio access points is provided with:

means for, when a said mobile terminal is to be handed over from a current radio access point to which it is currently connected to a new radio access point, transferring information of all sessions that said mobile terminal has set to the new radio access point; and

means for acquiring said setting information of sessions that is transmitted in from said current radio access point.

4. A mobile communication network system according to claim 2, wherein:

said mobile communication network further comprises a mobility management node that is made up of a plurality of virtual mobility management nodes that are each provided with:

means that is prepared for each of said external networks for transmitting and receiving packets only with a said virtual network that has been prepared for use by a corresponding external network;

means for holding positional information that has been reported from said mobile terminals;

means for, when packets that are addressed to said mobile terminals are received, transferring these packets to positions that have been reported from said mobile terminals;

and wherein each of said mobile terminals is further provided with:

means for reporting positional information to said virtual mobility management node that corresponds to said external network to which the mobile terminal is to be connected.

5. A mobile communication network system according to any one of claims 2 to 5, wherein said mobile communication network further comprises:

a control/management virtual network;

means for transmitting and receiving, by way of said control/management virtual network, packets for control and management that are exchanged between nodes that are arranged within said mobile communication network and that include said radio access points and said mobility management nodes; and

means for refusing packets for control and management that have been received from sources other than said control/management virtual network.

6. A mobile communication method in a mobile communication network system comprising:

a mobile communication network,

a plurality of external networks,

a plurality of mobile terminals,

a plurality of gateways for connecting said external networks and said mobile communication network, and

a plurality of radio access points for connecting said mobile terminals to said mobile communication network;

said mobile communication method comprising steps wherein:

a said mobile terminal sets a session for any of said external networks with said radio access point;

a said radio access point transfers packets that have been received from any said session to a virtual network that has been prepared for each of said external networks that corresponds to the session; and

said radio access point transfers packets that have been received from said virtual network that corresponds to any external network to the session that has been set for use of said external network by said mobile terminal that is the destination of the packets.

7. A mobile communication method according to claim 6, further comprising steps wherein:

when a said mobile terminal is to be handed over from a current radio

access point to which it is currently connected to a new radio access point, said current radio access point transfers all of said session information that said mobile terminal has set to said new radio access point; and

said new radio access point acquires from said current radio access point all of said session setting information that said mobile terminal has set.

8. A mobile communication method according to claim 6, further comprising steps wherein:

each of a plurality of virtual mobility management nodes that are prepared for each of said external networks and that together constitute a mobility management node that is provided within said mobile communication network transmits and receives packets only with a said virtual network that has been prepared for the use of a corresponding said external network;

a said mobile terminal reports positional information to said virtual mobility management node that corresponds to said external network to which said mobile terminal is connected;

each of said virtual mobility management nodes holds positional information that has been reported from said mobile terminal, and upon receiving packets that are addressed to said mobile terminal, transfers these packets to the position that is reported from said mobile terminal.

9. A mobile communication method according to any one of claims 7 and 8, further comprising steps wherein:

packets for control and management that are transmitted and received between said radio access points, said mobility management nodes, and said gateways that are arranged within said mobile communication network are

transmitted and received by way of a control/management virtual network that is provided within said mobile communication network; and

packets for control and management that have been received from a source other than said control/management virtual network are refused.